

Claims

What is claimed is:

1. An insulation stripping connector for providing an electrical connection to a wire, comprising a body; a pair of outer legs extending away from said body in a first direction, each of said outer legs having a first end attached to said body and a second end distal to said body; and a pair of inner legs extending toward said body in a second direction, which is generally opposite said first direction, to form a wire slot therebetween, each of said inner legs being joined to a corresponding one of said outer legs at said second end thereof, and each of said inner legs terminating at a free end which is spaced from said body and from said outer legs, each of said inner legs and each of said outer legs being sufficiently flexible in order to enable said wire slot to open in response to the insertion of a wire into said wire slot, at least one of said outer legs being notched in the vicinity of said first end thereof so as to increase the flexibility of said at least one of said outer legs, thereby enabling said wire slot to open wider in order to accommodate a large range of wire sizes.

2. The insulation stripping connector as claimed in Claim 1, wherein each of said outer legs is notched in the vicinity of said first ends thereof, whereby the flexibility of both of said outer legs is increased.

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3. The insulation stripping connector as claimed in Claim 1, wherein each of said outer legs has an inboard side proximate to said wire slot and an outboard side opposite said inboard side.

4. The insulation stripping connector as claimed in Claim 3, wherein one of said outer legs has a first notch formed in said inboard side thereof.

5 5. The insulation stripping connector as claimed in Claim 4, wherein the other of said outer legs has a second notch formed in said inboard side thereof.

6. The insulation stripping connector as claimed in Claim 3, wherein one of said outer legs has a first notch formed in said outboard side thereof.

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7. The insulation stripping connector as claimed in Claim 6, wherein the other of said outer legs has a second notch formed in said outboard side thereof.

8. The insulation stripping connector as claimed in Claim 3, wherein said
15 body, said inner legs and said outer legs form a cutout that separates each of said inner legs from said body and from its said corresponding one of said outer legs.

9. The insulation stripping connector as claimed in Claim 8, wherein said
cutout has a first branch that separates said free ends of said inner legs from said body,
20 and second and third branches that extend generally perpendicular from said first branch and terminate at ends distal from said first branch, said second branch separating one of said inner legs from its said corresponding one of said outer legs, and

said third branch separating the other of its said inner legs from said corresponding one of said outer legs.

10. The insulation stripping connector as claimed in Claim 9, wherein said first
5 branch terminates at one end in the form of a first notch formed in said inboard side of one of said outer legs and at another end in the form of a second notch formed in said inboard side of the other of said outer legs, whereby the flexibility of both of said outer legs is increased.

10 11. The insulation stripping connector as claimed in Claim 10, wherein said ends of said second and third branches are notched, whereby the flexibility of both of said inner legs is increased.

12. The insulation stripping connector as claimed in Claim 1, further
15 comprising barrier means, extending from said body towards said free ends of said inner legs, for inhibiting a wire from passing completely through said wire slot.

13. The insulation stripping connector as claimed in Claim 12, wherein said barrier means includes a coined area, located a predetermined distance from said free
20 ends of said inner legs, for inhibiting a wire from passing beyond said free ends of said inner legs.

14. The insulation stripping connector as claimed in Claim 1, wherein each of said inner legs has an opposite end distal from said free end thereof, each of said inner legs pivoting about said opposite end thereof relative to its said corresponding one of said outer legs.

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15. The insulation stripping connector as claimed in Claim 14, wherein each of said inner legs pivots toward and away from said wire slot.

16. The insulation stripping connector as claimed in Claim 1, wherein each of
10 said outer legs pivots about said first end thereof relative to said body.

17. The insulation stripping connector as claimed in Claim 16, wherein each of said outer legs pivots toward and away from said wire slot.

15 18. The insulation stripping connector as claimed in Claim 1, wherein said free ends of said inner legs are movable between a first position, in which said free ends abut each other, and a second position, in which said free ends are spaced apart from each other.

20 19. The insulation stripping connector as claimed in Claim 18, wherein said free ends of said inner legs move from said first position to said second position in response to the insertion of a wire in said wire slot.

20. The insulation stripping connector as claimed in Claim 19, wherein each of said inner legs has an inboard side proximate to said wire slot and an outboard side opposite said inboard side.

5 21. The insulation stripping connector as claimed in Claim 20, wherein one of said outer legs has a first stop extending from said inboard side thereof toward said outboard side of an adjacent one of said inner legs, and the other of said outer legs has a second stop extending from said inboard side thereof toward said outboard side of the other of said inner legs, said first stop defining the limit of said second position of said
10 adjacent one of said inner legs and said second stop defining the limit of said second position of said other of said inner legs.

22. The insulation stripping connector as claimed in Claim 19, wherein said free ends of said inner legs are resiliently biased toward said first position.

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23. The insulation stripping connector as claimed in Claim 1, wherein one of said inner legs is joined its said corresponding one of said outer legs at a first common span, and the other of said inner legs is joined to its said corresponding one of said outer legs at a second common span.

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24. The insulation stripping connector as claimed in Claim 23, wherein said first and second common spans are sized and shaped to form an entry gap located

therebetween, said entry gap being sized and shaped to receive a wire during an insertion procedure.

25. The insulation stripping connector as claimed in Claim 24, wherein said
5 first common span has a first coined area located proximate to said entry gap, and said second common span has a second coined area located proximate to said entry gap, said first and second coined areas cooperating with each other to strip off insulation from a wire which is being inserted in said wire slot.

10 26. The insulation stripping connector as claimed in Claim 25, wherein said first coined area has a first cutter for stripping off insulation from a wire and said second coined area has a second cutter for stripping off insulation from a wire.

15 27. The insulation stripping connector as claimed in Claim 1, wherein each of said inner legs has an inboard side proximate to said wire slot, and a transition point located on said inboard side at an end distal from said free end thereof, said transition point of one of said inner legs cooperating with said transition point of the other of said inner legs to strip off insulation from a wire which is being inserted in said wire slot.